

REMARKS

All of the amendments above find support in the specification by incorporating the definition for zinc stannate film at page 3, lines 27-29. Additional amendments have been made to the claims to clarify alternative language.

Previously submitted claims 4-36 and 38-50 were rejected under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants respectfully traverse the 112 rejection but in an attempt to narrow issues have amended claims 4, 5, 12, 15, 18, 22 and 28, 25 and 31 to use alternative language as indicated in MPEP 2173.05(h) at II. There it is indicated that alternative expressions using "or" are acceptable, such as "wherein R is A, B, C, or D." or as further indicated "made entirely or in part of"; or "iron, steel or any other magnetic material". Also, the insertion of the definition for zinc stannate film should assist in clarifying the alternative language. Therefore, the clarifications to the claims in regards to the alternative language are made for using a different type of alternative language than originally presented and not to limit the scope of the claims in any way from those originally filed.

The suggestion by the examiner for claim 15, line 17, has been made. Also, claims 48 and 50 have been amended to provide sufficient antecedent basis. In regards to claim 31, the typographical error of the use of the word "second" for the third dielectric layer twice has been corrected so that the latter instance of the use of this term is now directed to a "first" dielectric film of the third dielectric layer.

Previously submitted claims 4, 7, 9, 25, 28 and 31 were rejected under 35 U.S.C. 102(b) as being anticipated by the Depauw et al. (GB 2311540A) reference. Applicants respectfully traverse this rejection since the Depauw reference does not teach or suggest the use of a second dielectric layer which has at least two films, one of which is at a least a zinc oxide, tin oxide film and the other which is a film of an oxide of a zinc tin alloy. With the

definition added for the zinc, tin oxide film, it is respectfully submitted that it is clear that the amount of tin in such a film is in a weight percent range of greater than 0 to less than 10 with the majority of the balance of the metal material being zinc as claimed in claim 4. The other independent claims are equally not taught or suggested by the Depauw et al. reference since the second dielectric layer has a unique combination of the two films. As noted in the response to the previous Office Action, the Depauw et al. reference is devoid of any teaching of a film in a dielectric layer which is an oxide from a zinc tin alloy sputtering target so that both zinc and tin are present in the same film. The advantage of having such an oxide of such an alloy is to provide better chemical durability to the coating.

Claims 4, 7, 9, 25, 28 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Depauw et al. (GB 2,311,540A) (hereinafter "Depauw"). The Office Action alleges that Depauw teaches a coated sheet for use in a laminated assembly including a transparent substrate carrying two metal layers formed of silver and three layers of a transparent dielectric material; that the dielectric material includes oxides such as tin oxide, zinc oxide, silicon nitride, or a mixture thereof or a complex of zinc stannate, and that each dielectric layer can include more than one of these materials and each layer can be a composite layer formed of successive subsidiary layers of different compositions. The Office Action continues by alleging that combination of tin oxide and zinc oxide is generally advantageous, whether in admixture or in successive sub-layers; that the coated substrate also has a thin layer of a sacrificial metal, such as titanium, provided above and in contact with each metal (silver) layer and that Table A shows the successive layers (films) which may be used in forming the dielectric layers of the laminate.

Applicants respectfully traverse the rejection of claims 4, 7, 9, 25, 28 and 31 under 35 U.S.C. 102(b) as being anticipated by Depauw and request reconsideration thereof. Claims 7 and 9 are dependent on independent claim 4; claims 25, 28 and 31 are

independent claims. Claims 4, 25, 28 and 31 are amended in one form or another to recite, among other things, that the dielectric layer has, among other things, a plurality of films of which one of the films is selected from the group of a tin oxide, zinc oxide film and a second film of an oxide of an alloy of zinc and tin. The claims further recite that the tin oxide, zinc oxide film has a weight percent of tin in the range of greater than 0 and less than 10 with the majority of the remainder being zinc and/or zinc in the range of less than 100 and equal to or greater than 90 with the majority of the remaining tin. Support for the amendments to claims 4, 25, 28 and 31 is found, among other places, on page 6, lines 1-10, and page 8, lines 1-20, of the specification.

Claims 4, 25, 28 and 31 have not been amended to add limitations, but are amended to recite the definition of "tin oxide, zinc oxide film" given in the specification and to more positively recite the group of films.

Applicants respectfully submit that there is no teaching in Depauw of a tin oxide, zinc oxide film as recited in claims 4, 25, 28 and 31 nor of tin film of an oxide of an alloy of zinc and tins as recited in claims 4, 25, 28 and 31 having different compositions.

Based on the foregoing, applicants respectfully request admittance of the amendments to claims 4, 25, 28 and 31, and consideration of, and withdrawal of the rejection of claims 4, 7, 9, 25, 28 and 31 under 35 U.S.C. 102(b).

Claims 5, 6 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Depauw. The Office Action alleges that Depauw teaches a coated substrate as discussed above and discloses that the successive layers or films which make up the three dielectric layers of the laminate may include tin oxide, zinc oxide, and zinc stannate, and that Depauw further teaches that it is advantageous to use a mixed oxide of tin and zinc. The Office Action continues by stating that Depauw does not give specific examples wherein a zinc stannate is next to a mixed oxide of tin and zinc and that absent a showing of criticality; however, the Office

Action alleges that since Depauw clearly teaches that these materials may be used in making the successive layers, it would have been obvious to one of ordinary skill in the art at the time of the invention to use these materials in succession.

Claims 5, 6 and 38 are dependent on claim 4.

Applicants have shown supra that there is no disclosure in Depauw of a dielectric layer including a second dielectric film of tin oxide, zinc oxide (having the composition recited in the claim) and/or zinc stannate. The advantages of a zinc oxide tin oxide film are discussed on page 8, lines 1-20, of the specification.

Because there is no disclosure in Depauw of the features recited in claim 4, there is no disclosure in Depauw of the features recited in claims 5, 6 and 38.

Based on the foregoing, applicants respectfully requests withdrawal of the rejection of claims 5, 6 and 38 under 35 U.S.C. 103(a).

Claims 8, 10-24, 26, 27, 29, 30, 32-36 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Depauw in view of Gillery US 4,610,771 (hereinafter "Gillery"). The Office Action alleges that Depauw discloses a coated sheet as discussed above but does not teach a preferred zinc/tin ratio; that Gillery teaches a film composition comprising multiple layers, preferably a highly reflective film such as gold, silver and copper sandwiched between metal oxide layers. The Office Action continues by alleging that the anti-reflection layer comprises a metal oxide, which is preferably zinc stannate and that the film of an oxide of an alloy of zinc and tin has a composition of preferably 10-90 percent zinc and 90-10 percent tin, where a zinc/tin ratio from 40:60 to 60:40 is preferred. The Office Action further alleges that at the time the invention was made it would have been obvious to one of ordinary skill in the art to use the zinc stannate composition of Gillery in the laminate of Depauw et al. to produce a laminate with higher transmittance.

The Office Action continues by stating that Depauw also does not disclose the exact thickness ranges for the layers and alleges that it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the thickness of the ranges to achieve the desired transmittance, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involved only routine skill in the art. (*In re Aller*, 105 USPQ 233).

Applicants respectfully traverse the rejection of claims 8, 10-24, 26, 27, 29, 30, 32-36 and 39-43 under 35 U.S.C. 103(a) and request reconsideration thereof. Claims 8, 10-24 and 39-43 are dependent on claim 4; claims 26 and 27 are dependent on claim 25; claims 29 and 30 are dependent on claim 28 and claims 32-36 are dependent on claim 31.

Claims 4, 25, 28 and 31 and Depauw were discussed above. Applicants for the sake of discussion only acknowledge that Gillery discloses a film of an oxide of an alloy of zinc and tin similar to the one disclosed and claimed by applicants.

Applicants respectfully submit that an artisan combining Depauw and Gillery would replace one of the films of Depauw with the film of Gillery. This combination of Depauw and Gillery would not disclose applicants' invention of a dielectric layer having two layers, one of which is a tin oxide, zinc oxide film. The specific combination of films as recited in the claims is not disclosed in Depauw and/or Gillery. More particularly, there is no disclosure in the combination of Depauw and Gillery of a first dielectric film over a second dielectric film when the second dielectric film is tin oxide, zinc oxide film or zinc stannate as recited in the claims.

Based on the above, applicants respectfully request withdrawal of the rejection of claims 8, 10-24, 26, 27, 29, 30, 32-36 and 39-43 under 35 U.S.C. 103(a) and request allowance of claims 4-36 and 38-43.

Applicants by this amendment have added claims 44-50. Claims 44 and 45 are dependent on claim 4; claims 46-50 are dependent on claims 7, 9, 25, 28 and 31 respectively.

Support for claims 44-50 is found, among other places, in the originally filed claims and the specification. The arguments to patentably distinguish claims 4-36 and 38-43 over the art is applicable to patentably distinguish claims 44-50 over similar art.

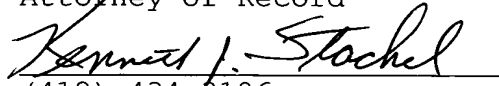
Based on the above, applicants respectfully request admittance, consideration and allowance of claims 44-50.

This amendment represents a sincere effort to place the application in condition for allowance. In the event issues remain, the Examiner is invited to call the undersigned to discuss those issues before further action is taken on the case.

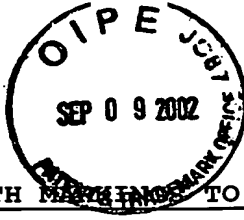
Attached hereto is a marked-up version of the amendments to the claims made by the instant amendment. The attached page is captioned **"VERSION WITH MARKINGS TO SHOW CHANGES MADE"**.

Respectfully submitted,

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VERSION WITH AMENDMENTS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 4, 6, 8, 10-33, 38-43 and 45-50 have been amended as follows:

4. (thrice amended) An infrared reflective coated article comprising:

a substrate;

a dielectric layer defined as a first dielectric layer sputter deposited over the substrate, the first dielectric layer comprising:

first dielectric film comprising at least one film [selected from the group of] wherein the one film is a zinc oxide film, a silicon oxide film, a tin oxide film, a silicon nitride film, a silicon oxynitrate film, and a [zinc stannate] film of an oxide of an alloy of zinc and tin[, ] [wherein the zinc stannate film has] having zinc in weight percent range of equal to and greater than 10 and equal to and less than 90, and tin in the weight percent range of equal to and less than 90 and equal to and greater than 10, and the [zinc stannate] film of the oxide of an alloy of zinc and tin of the first dielectric layer is defined as a first [zinc stannate] film of the oxide of an alloy of zinc and tin, and

a second dielectric film deposited over the first dielectric film, the second dielectric film comprising at least one film [selected from the group of] where the film is a zinc oxide, tin oxide film wherein the zinc oxide, tin oxide film has tin in the weight percent range of greater than 0 and less than 10 and the majority of the balance zinc [and] or a [second zinc stannate film] film of an oxide of an alloy of zinc and tin having [wherein the second zinc stannate film has] zinc in the weight percent range of equal to and greater than 10

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and equal to and less than 90 and tin in the weight percent range of equal to and less than 90 and equal to and greater than 10 and wherein when the dielectric layer has a first film of an oxide of an alloy of zinc and tin and this additional film of an oxide of an alloy of zinc and tin is the second such film[dielectric zinc stannate films], the composition of the first such film [zinc stannate film] is at least about 5 weight percent different than the composition of the second such [zinc stannate] film, and  
an infrared reflective layer deposited on the first dielectric layer.

6. (Twice amended) The coated article of claim 4 wherein the first dielectric film is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin, the infrared reflective layer is a silver film and the electrical enhancing film is the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

8. (Twice amended) The coated article of claim 7 wherein the second dielectric layer is a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin having 10-90 weight percent zinc and 90-10 weight percent tin.

10. (Twice amended) The coated article of claim 9 wherein at least one of the second and third dielectric layers includes a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin having 10-90 weight percent zinc and 90-10 weight percent tin.

11. (Twice amended) The coated article of claim 4 wherein the infrared reflective layer is a first infrared reflective layer and further including:



a first metal primer layer over the first reflective layer;

a second dielectric layer over the first metal primer layer, the second dielectric layer comprising a first dielectric film and a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin defined as a first zinc stannate film film of an oxide of an alloy of zinc and tin, the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin having zinc in the weight percent range of equal to and greater than 10 and equal to and less than 90 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 90, the first dielectric film of the second dielectric layer deposited over the first metal primer layer;

a second infrared reflective layer deposited over the second dielectric layer;

a second metal primer layer deposited over the second infrared reflective layer;

a third dielectric layer deposited over the second primer layer, and

optionally a protective layer over the third dielectric layer.

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12. (~~twice~~ Thrice amended) The coated article of claim 40 wherein the first dielectric film of the second dielectric layer is [selected from the group of films consisting essentially of] a zinc oxide film[;] or a zinc oxide, tin oxide film or [and] a zinc stannate film film of an oxide of an alloy of zinc and tin defined as a second zinc stannate film film of an oxide of an alloy of zinc and tin, the second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the second dielectric layer having a composition different than the composition of the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the second dielectric layer.

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13. (Twice amended) The coated article of claim 12 wherein the second ~~zinc stannate film~~ film of an oxide of an

alloy of zinc and tin of the second dielectric layer has zinc in the weight percent range of equal to and greater than 60 and equal to and less than 90 and tin in the weight percent of equal to and greater than 10 and equal to and less than 40, and the third dielectric layer is a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

14. (Twice amended) The coated article of claim 4 wherein the infrared reflective layer is a first infrared reflective layer and further including:

a first metal primer layer over the first reflective layer;

a second dielectric layer over the first metal primer film;

a second infrared reflective layer over the second dielectric layer;

a second metal primer layer over the second infrared reflecting metal layer;

a third dielectric layer over the second metal primer layer, the third dielectric layer comprising a first dielectric film and a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin defined as a first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin, the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin having zinc in a weight percent with the range of equal to and greater than 10 and equal to and less than 90 and tin within the weight percent range of equal to and less than 90 and equal to and greater than 10, the third dielectric layer deposited over the second metal primer; and

optionally a protective film overlying the third dielectric film.

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15. (twice amended) The article of claim 14 wherein the first dielectric film of the third dielectric layer is [selected from the group consisting essentially of] a zinc oxide film[;] or a zinc oxide, tin oxide film [and] or a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin

defined as a second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin, the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin of the first dielectric film of the third dielectric layer having a composition different than the composition of the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin of the third dielectric layer.

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16. (Amended) The article of claim 15 wherein the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin of the third dielectric layer has zinc in the weight percent range of equal to and greater than 60 and equal to and less than 90 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

17. (Twice amended) The coated article of claim 4 wherein the infrared reflective layer is a first infrared reflective layer and further including:

a first metal primer layer over the first reflective layer;

a second dielectric layer over the first metal primer layer, the second dielectric layer comprising a first dielectric film and a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin defined as a first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin, the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin having zinc in a weight percent within the range of equal to and greater than 10 and equal to and less than 90 and tin within the weight percent range of equal to and less than 90 and equal to and greater than 10, the second dielectric layer deposited over the first metal primer layer;

a second infrared reflective layer over the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin of the second dielectric layer;

a second metal primer layer over the second infrared reflective layer;

a third dielectric layer over the second metal primer layer, the third dielectric layer comprising a first dielectric film and a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin defined as a first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin, the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin having zinc in a weight percent within the range of equal to and greater than 10 and equal to and less than 90 and tin within the weight percent range of equal to and less than 90 and equal to and greater than 10, the third dielectric layer deposited over the second metal primer layer; and

optionally a protective film overlying the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the dielectric layer.

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18. (~~twice~~ thrice amended) The coated article of claim 17 wherein the first dielectric film of the second dielectric layer and the first dielectric film of the third dielectric layer each has a film [selected from the group consisting essentially of] which is a zinc oxide film[;] or zinc oxide, tin oxide film [and] or a second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin wherein the second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first dielectric film of the first dielectric layer and the second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first dielectric film of the third dielectric layer has a composition different than the composition of the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin in the respective same second or third dielectric layer.

19. (Twice amended) The coated article of claim 18 wherein the second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first and second dielectric layers each include zinc in the weight percent range of equal to and greater than 60 and equal to and less than 90 and tin

in the weight percent of equal to and greater than 10 and equal to and less than 40.

20. (Twice amended) The coated article of claim 17 wherein the second dielectric layer further includes a third dielectric film over the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the second dielectric layer.

21. (Twice amended) The coated article of claim 18 wherein the second dielectric layer further includes a third dielectric film over the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the second dielectric layer wherein the third dielectric film of the second dielectric layer is a film selected from the group consisting of zinc oxide film, zinc oxide, tin oxide film and a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin defined as a third ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin, the third ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin has a composition different than the composition of the ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the second dielectric film closest to the third ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin.

22. (~~twice~~ thrice amended) The coated article of claim 18 wherein the second dielectric film of the second dielectric layer and the second dielectric film of the third dielectric layer each has a film [selected from the group consisting essentially of] which is a zinc oxide film[;] or a zinc oxide, tin oxide film [and] or a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin defined as a second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin wherein the first and second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tins in the same dielectric layer have different compositions.

23. (Twice amended) The coated article of claim 43 wherein the first and third dielectric films of the second dielectric layer and the first dielectric film of the third dielectric layer each include zinc in the weight percent range of equal to and greater than 60 and equal to and less than 90 and tin in the weight percent of equal to and greater than 10 and equal to and less than 40.

24. (Twice amended) The coated article of claim 20 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin, the second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first dielectric layer is on the glass piece and has a thickness in the range of  $230 \pm 40$  Angstroms Å; the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first dielectric layer is on the second ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first dielectric layer and has a thickness in the range of  $80 \pm 40$  Å; the first infrared reflective metal layer is a first silver film deposited on the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the first dielectric layer and has a thickness in the range of  $110 \pm 30$  Å, the metal primer layer is a titanium film deposited on the first silver layer and has a thickness in the range of 17-26 Å; the first dielectric film of the second dielectric layer is deposited on the titanium film and has a thickness in the range of  $80 \pm 40$  Å; the first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin of the second dielectric layer is deposited on the first dielectric film of the second dielectric layer and has a thickness in the range of  $740 \pm 40$  Å; the second infrared reflective metal layer is a second silver film deposited on the second dielectric film of the second dielectric layer and has a thickness in the range of  $110 \pm 38$  Å; the second primer film is a titanium film deposited on the second silver layer and having a thickness in the range of 18 - 31 Å; the first

dielectric film of the third dielectric layer is deposited on the second titanium film and has a thickness in the range of  $80 \pm 40\text{\AA}$ ; the first zinc stannate layer of the third dielectric layer is deposited on the first dielectric film of the third dielectric layer and has a thickness in the range of  $120 \pm 40\text{\AA}$ , and the protective layer is a titanium metal film deposited on the first zinc stannate layer of the third dielectric layer and has a thickness in the range of  $29 \pm 3\text{\AA}$ .

25. (~~twice~~ thrice amended) A coated article comprising:

- a substrate;
- a first dielectric layer over the substrate;
- a first infrared reflective layer over the first dielectric layer;
- a first metal primer layer over the first infrared reflective layer;
- a second dielectric layer over the first metal primer, the second dielectric layer having a first dielectric film comprising at least one film [selected from the group of] which is zinc oxide, tin oxide film wherein the zinc oxide, tin oxide film has zinc in the weight percent range of equal to or greater than 90 and less than 100 and the majority of the balance tin [and] or a first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin, and a second dielectric film where the second dielectric film [having] has a composition different than the first dielectric film of the second dielectric layer;
- a second infrared reflective layer over the second dielectric layer;
- a second primer layer over the second reflective layer;
- a third dielectric layer over the second metal primer layer; and
- optionally a protective layer overlying the third dielectric layer.

26. (Amended) The coated article of claim 25 wherein the first dielectric layer includes a ~~zinc-stannate film~~ film of an oxide of an alloy of zinc and tin, the second dielectric film of the second dielectric layer is a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin and the third dielectric layer includes a ~~zinc-stannate film~~ film of an oxide of an alloy of zinc and tin, each of the ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tins having zinc in the weight percent range of 10-90 and tin in the weight percent range of 90-10.

27. (Amended) The coated article of claim 26 wherein the first dielectric film of the second dielectric layer is the first ~~zinc-stannate film~~ film of an oxide of an alloy of zinc and tin having zinc in the weight percent range of equal to and greater than 90 and equal to and less than 60 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

28. (~~twice~~ thrice amended) A coated article comprising:

- a substrate;
- a first dielectric layer over the substrate;
- a first infrared reflective layer over the first dielectric layer;
- a first metal primer layer over the first infrared reflective layer;
- a second dielectric layer over the first metal primer layer;
- a second infrared reflective layer over the second dielectric layer;
- a second metal primer layer over the second reflective metal layer;
- a third dielectric layer having a first dielectric film comprising at least one film [selected from the group of] which is zinc oxide film[;] or zinc oxide, tin oxide film wherein the zinc oxide, tin oxide film has either tin in the



weight percent range of greater than 0 and less than 10 and the majority of the balance zinc or zinc in the weight percent range of equal to or greater than 90 and less than 100 and the majority of the balance tin and a first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin [and] or a second dielectric film overlying the first dielectric film, the second dielectric film having a composition different from the first dielectric film; and

optionally a protective film overlying the third dielectric layer.

29. (Amended) The coated article of claim 28 wherein the first and second dielectric layers are each a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin, and the second dielectric film of the third dielectric layer is a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin and each of the ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin has zinc in the weight percent range of 10-90 and tin in the weight percent range of 90-10.

30. (Amended) The coated article of claim 29 wherein the first dielectric film of the second dielectric layer has zinc in the weight percent range of equal to and greater than 90 and equal to and less than 60 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

31. (twice amended) A coated article comprising:  
a substrate;  
a first dielectric layer over the substrate;  
a first infrared reflective layer over the first dielectric layer;  
a first primer layer over the first reflective metal layer;  
a second dielectric layer having a first dielectric film comprising at least one film which is [selected from the group of] zinc oxide, tin oxide film or [and] a first ~~zinc~~

~~stannate film~~ film of an oxide of an alloy of zinc and tin, and a second dielectric film overlying the first dielectric film having a composition different than the first dielectric film of the second dielectric layer;

a second infrared reflective layer over the second dielectric layer;

a second primer layer over the second reflective layer;

a third dielectric layer over the second metal primer layer, the third dielectric layer having a first dielectric film comprising at least one film [selected from the group of a] which is a zinc oxide, tin oxide film or [and] a first ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin and a second dielectric film, the second dielectric film of the third dielectric layer has [have] a composition different than the composition of the [second] first dielectric film of the third dielectric layer wherein the zinc oxide, tin oxide film of the first dielectric film of the second dielectric layer and of the first dielectric film of the third dielectric layer has [is selected from the group consisting of] tin in the weight percent range of greater than 0 and less than 10 and the majority of the balance zinc, zinc in the weight percent range of less than 100 and equal to and greater than 90 and the majority of the balance tin and mixtures thereof; and

optionally a protective film overlying the third dielectric layer.

32. (Amended) The coated article of claim 31 wherein the first dielectric layer, the second dielectric film of the second and third dielectric layers are each a ~~zinc stannate film~~ film of an oxide of an alloy of zinc and tin having zinc in the weight percent range of 10-90 and tin in the weight percent range of 90-10.

33. (Amended) The coated article of claim 32 wherein the first dielectric film of the second and third

dielectric layers are each a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin having zinc in the weight percent range of equal to and greater than 90 and equal to and less than 60 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

38. (Amended) The coated article of claim 5 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

39. (Amended) The coated article of claim 8 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

40. (Amended) The coated article of claim 11 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

41. (Amended) The coated article of claim 15 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

42. (Amended) The coated article of claim 17 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

43. (Amended) The coated article of claim 22 wherein the first dielectric film of the first dielectric layer is the first ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin.

45. (Amended) The coated article of claim 4 wherein the composition of the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin is zinc in the range of 60 to 90 weight percent and tin in the range of 10 to 40 weight percent.

46. (Amended) The coated article of claim 7 wherein the composition of the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin is zinc in the range of 60 to 90 weight percent and tin in the range of 10 to 40 weight percent.

47. (Amended) The coated article of claim 9 wherein the composition of the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin is zinc in the range of 60 to 90 weight percent and tin in the range of 10 to 40 weight percent.

48. (Amended) The coated article of claim 25 wherein the composition of the second dielectric film is a ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin is zinc in the range of 60 to 90 weight percent and tin in the range of 10 to 40 weight percent.

49. (Amended) The coated article of claim 28 wherein the composition of the second ~~zinc stannate film~~film of an oxide of an alloy of zinc and tin is zinc in the range of 60 to 90 weight percent and tin in the range of 10 to 40 weight percent.

50. (Amended) The coated article of claim 31 wherein the composition of the second dielectric ~~zinc stannate film~~film is an oxide of an alloy of zinc and tin is zinc in the range of 60 to 90 weight percent and tin in the range of 10 to 40 weight percent.